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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,442	03/04/2002	Hideaki Hirai	R2184.0137/P137	4020

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EXAMINER

HINDI, NABIL Z

ART UNIT PAPER NUMBER

2655

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/086,442

Applicant(s)

HIRAI ET AL.

Examiner

NABIL Z HINDI

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9-13 and 82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9-13 and 82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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In response to applicant's request for reconsideration dated July 27, 2005. The following action is taken:

Due to the newly discovered prior art. The final rejection dated April 28, 2005 is withdrawn.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 6, 7, 9-13 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoo et al (6009066).

The reference shows an optical head comprising: a first and second light beam sources 31, 40, a polarization type light path splitting means (dichroic element) 35, a non-polarization type splitting means 42, a light path combining element (any element 35, 36, 38 combines the first and second light beams), a light beam converging element 38, a phase plate 36 wherein the polarization type element (dichroic element), the phase plate 36 and the objective lens are used by both of the light beams 31 and 40 to read the toe types optical disks.

With respect to the limitation of claim 3. it is a logical engineering capability to have the effective diameter of the objective lens to be the smallest in order to focus the light beam onto the disk.

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With respect to the limitation of claim 4. The use of an inferred and red light beam is predicated on the wavelengths of the light beam sources. The wavelengths of the first and second light beams 31 and 40 to read a CD and DVD type disks fall within the read and inferred wavelengths.

With respect to the limitations of claims 6, 7, 9, 12 and 13. The reference discloses the use of a  $\frac{1}{4}$  wavelength plate 36 corresponding to element 105a of the claimed invention falling between the dichroic element 35 and the objective lens 38.

With respect to the limitation of claim 10 see elements 31, 40, 35, 36 and 38.

With respect to the limitation of claim 82. the reference shows the use of a non-polarization type element 42 within a module combining the elements 41 and 40.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 6, 7, 9-13 and 82 are rejected under 35 U.S.C. 102(e) as being anticipated by Jutte (6876619).

The reference shows the use of an optical head comprising: a first and second light beam sources 1 and 20, a dichroic element 8, a  $\frac{1}{4}$  wavelength plate 9, an objective lens 11, and a non-polarization beam splitter 23. The dichroic element,  $\frac{1}{4}$  wave plate and the objective lens 11 are used by both of the light beams 1 and 20 to read different types optical disks.

With respect to the limitation of claim 3. It is a logical engineering capability to have the smallest objective lens diameter in order to focus the light beam into a disk.


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With respect to the limitation of claim 4. the reference discloses the use of a first and second light beam source with a wavelength range that falls within the read and inferred light beams wavelengths.

With respect to the limitations of claims 6, 7, 9, 12 and 13. the reference shows the use of a  $\frac{1}{4}$  wavelength plate 9 positioned between the dichroic element 8 and the objective lens 11.

With respect to the limitation of claim 82. the reference shows a combining element (any part of elements 8, 9 and 11) having a module with elements 23, 20 and 31.

Any inquiry concerning this communication should be directed to NABIL Z. HINDI at telephone number (571) 272-7618.

  
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